

WI Department of Natural Resources

2005 Non-Corvid Wildlife West Nile Virus Surveillance

Preliminary Summary

Since 2001 the Wisconsin Department of Natural Resources (WDNR) has worked with other agencies and organizations to more fully understand the presence and spread of West Nile Virus (WNV) in Wisconsin. With the help of the Wisconsin Department of Public Health, the Wisconsin State Laboratory of Hygiene, the Wisconsin Veterinary Diagnostic Lab, USDA- Animal and Plant Health Inspection Service- Wildlife Services, and Marshfield Clinical Research Foundation (MCRF), nearly 2,000 birds and non-human mammals have been tested for the evidence of WNV.

In previous years WDNR West Nile Surveillance included the sampling of corvids (crows, blue jays, ravens). Since 2004, Wisconsin corvids have been sampled by USDA-Wildlife Services.

In 2002, the WDNR began testing selected non-corvid birds and some mammals for the presence of WNV to evaluate the spread and ecological importance of WNV infections in a variety of wildlife species. Our long-term objectives related to WNV include:

- Investigate if and how WNV impacts wildlife populations.
- Collect information that will assist in understanding the trends and distribution of WNV nationwide.
- Assess the possible risks of WNV to humans, including hunters and bird enthusiasts.

From 2002-2005 over 1000 birds and mammals, representing over 100 species, have been tested.

From 2002 through 2003, with the help of biologists, wardens and the public, 107 bald eagles, 77 other raptors, 158 perching birds, 184 waterbirds, 62 upland game birds, and 79 mammals were tested for WNV. Evidence of WNV infection was found in three mammal species and 16 bird species. The mammal species included gray wolf, big brown bat, and gray squirrel; the 16 bird species included tundra swan, sandhill crane, goshawk, Cooper's hawk, sharp-shinned hawk, red-tailed hawk, bald eagle, merlin, mourning dove, hairy woodpecker, downy woodpecker, chickadee, robin, bluebird, grackle, and cedar waxwing.

During 2004, seven animals showed evidence of exposure to West Nile Virus, the result of testing 242 individuals comprising 55 different species, from 56 different counties. The seven positive animals included an elk, a little brown bat, a bald eagle, two red-tailed hawks, and two sharp-shinned hawks.

2005 Wisconsin Department of Natural Resources Surveillance Plan

In 2005 the WDNR surveillance plan continued to focus on studying WNV in non-corvid bird species and mammals. Species and groups of species targeted for 2005 surveillance included:

1. Any wildlife with a history of showing neurological signs (and collected for necropsy during the WNV season, approximately May 1-October 31)
2. Birds of any species involved in a significant mortality event ("die-off") which occurs during the WNV season, approximately May 1-October 31.
3. Gray wolves

4. Gray Squirrels
5. Bats
6. Gulls
7. Cranes: Sandhill and Whooping
8. Song Birds, not including starlings, grackles, house sparrows
9. Woodpeckers
10. Raptors (** Bald Eagles -- only as part of necropsy evaluations)
11. Game birds, not including farm raised pheasants
12. Cormorants

Results of 2005 West Nile Virus Surveillance

The following non-corvid birds and mammals have been sampled for WNV for 2005:

Bald eagles:	14
Other raptors:	14
Other non-corvids:	67
Bats:	23
Wolves:	5
<u>Other mammals:</u>	<u>5</u>
Total:	128

Samples are being submitted to MCRF for testing; as of 12/08/05 no results have been reported. Results will be appended to this report, when they are available.

